

ABSTRACT

A signal processing system and method for breaking a time series into piece-wise discrete trends and determining whether new data represents the continuation of a trend. The method identifies and utilizes at least one set of trend determination parameters, which have favorable trend fit characteristics relative to other possible sets of parameters. In a semi-automated embodiment, the error and trend length characteristics are cross-plotted for multiple sets of possible parameters, and one or more of the parameter sets is selected from the graph. In an automated embodiment, an objective function is formulated from the characteristics, and an optimization technique is applied to identify one or more good parameter sets.